



Create Contours

INTRODUCTION

A contour is a line of constant value on a two-dimensional (though not necessarily planar) surface. The region on one side of the line is larger than the isovalue; the region on the other side is less than the isovalue. EnSight creates contour lines in groups where the isovalues used correspond to the levels in the colormap defined for the contour variable. Individual contour lines can also be labeled with the corresponding colormap level number.

BASIC OPERATION

2. Click the Contours icon.

1. Select the parent part.

3. Select the variable to use.

4. Click Create.

The Contour Quick Interaction area lets you set the number of subcontours (contours between the levels defined in the contour variable colormap) as well as attach labels to the contour lines.

In the parts list, double-click the contour part you wish to edit.

1. To add subcontours, enter the desired number and press return.

2. To turn on contour labels, click the Label Attributes button, then the Visible button.

Note that only the main contour lines (not the subcontours) are labeled with the colormap level number.

3. To change the label color, either enter values in the R,G,B text fields (and press return) or click the Mix... button to open the Color Selector dialog.

4. To change the spacing between labels, enter a new value in the Spacing text field and press return.

5. To add a display offset (to move the contour off the parent part by a small amount) enter the desired value and press return.

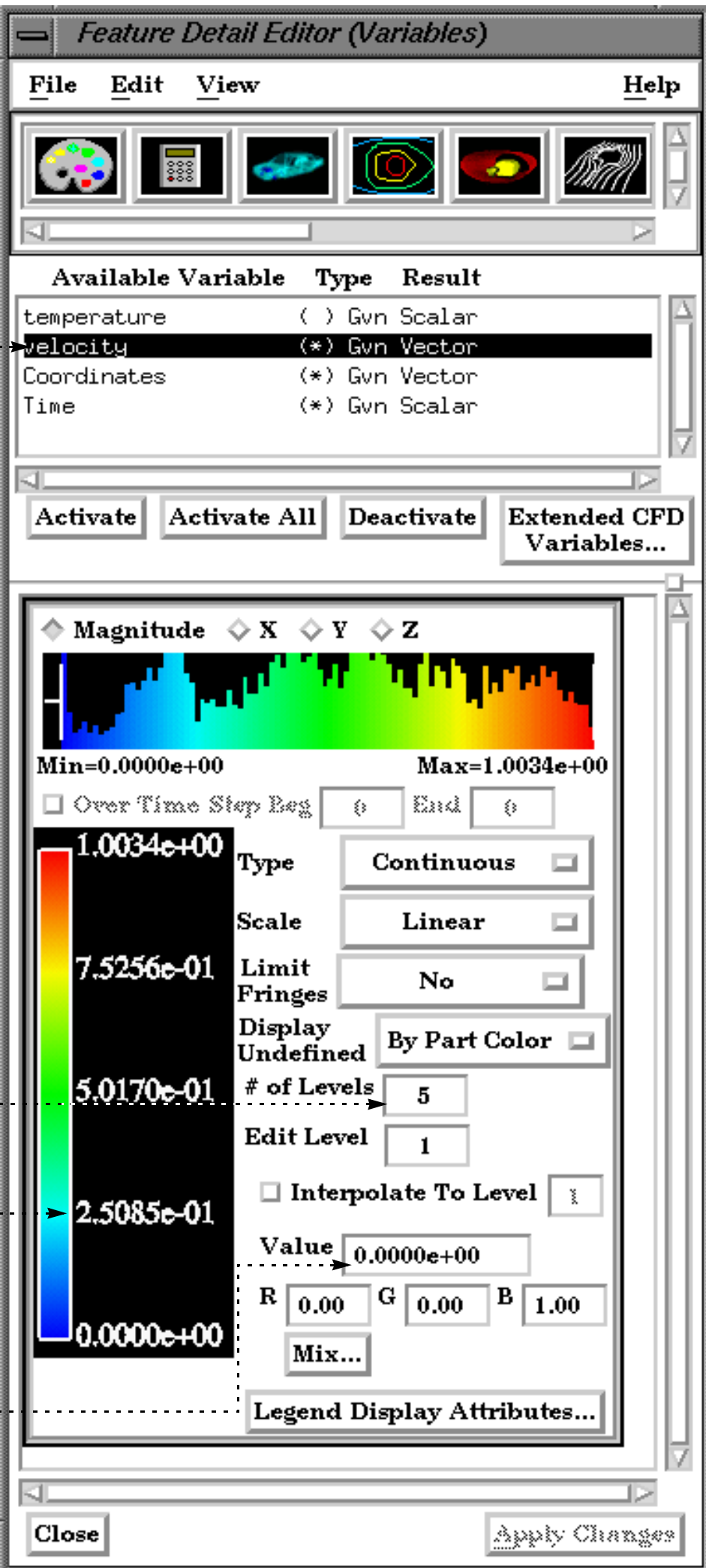


ADVANCED USAGE

The colormap of the variable used to create a contour specifies the isolines in the resulting part: the number of levels in the colormap sets the number of isolines for the contour and the variable value associated with each level is the isovalue used for the corresponding isoline. Colormaps can be edited using the Feature Detail Editor for Variables.

- 1. Open the Feature Detail Editor for Variables (either by double-clicking the desired variable in the variables list or selecting Edit > Variables Editor...

- 2. Be sure the desired variable is selected in the dialog's variable list.



- 3. To change the number of levels, enter the desired value in the # of Levels text field and press return.

Note that the number of levels must be at least 2 but no greater than 21.

- 4. To change the value associated with a level, click on the level label in the legend display.

- 5. Enter the desired value in the Value text field and press return.

Note that other changes to the colormap may also effect contour parts. For more information, see [How To Edit Color Maps](#).



OTHER NOTES

Unlike most part creation operators, contours are created from the client’s representation of the part – not the server’s. If the parent part of the contour consists of one-dimensional elements or has no client-side visual representation at all, the resulting contour will be empty. This would be the case if the parent part was currently displayed as feature angle, border representation, or not loaded. The 3D border, 2D full representation is typically used for contour part parents. See [How to Change Visual Representation](#) for more information.

SEE ALSO

[Introduction to Part Creation](#), [How To Edit Color Maps](#).

User Manual: [Contour Create/Update](#)